

FIG. 1

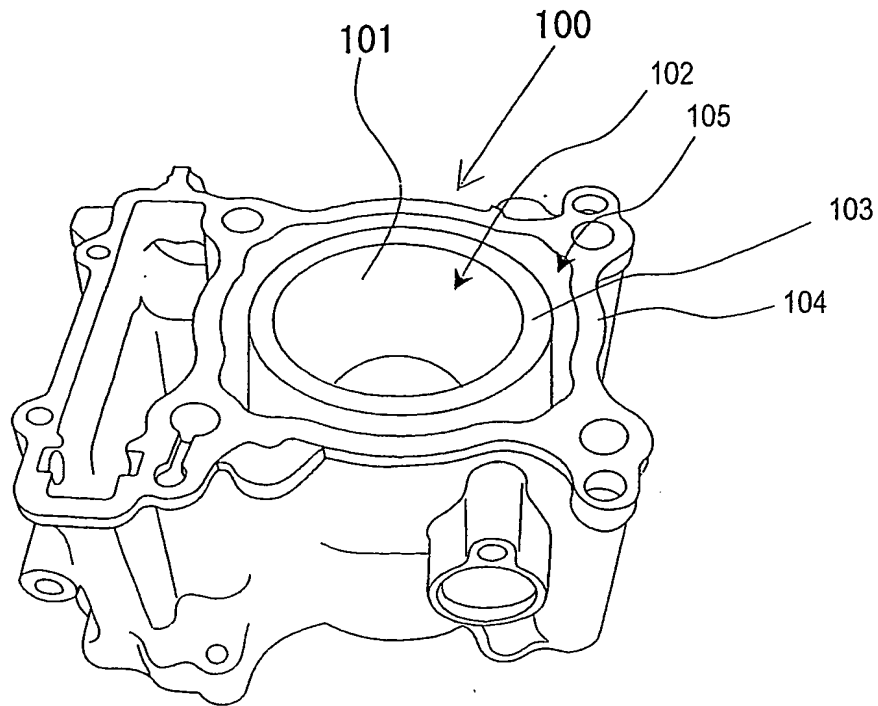


FIG. 2

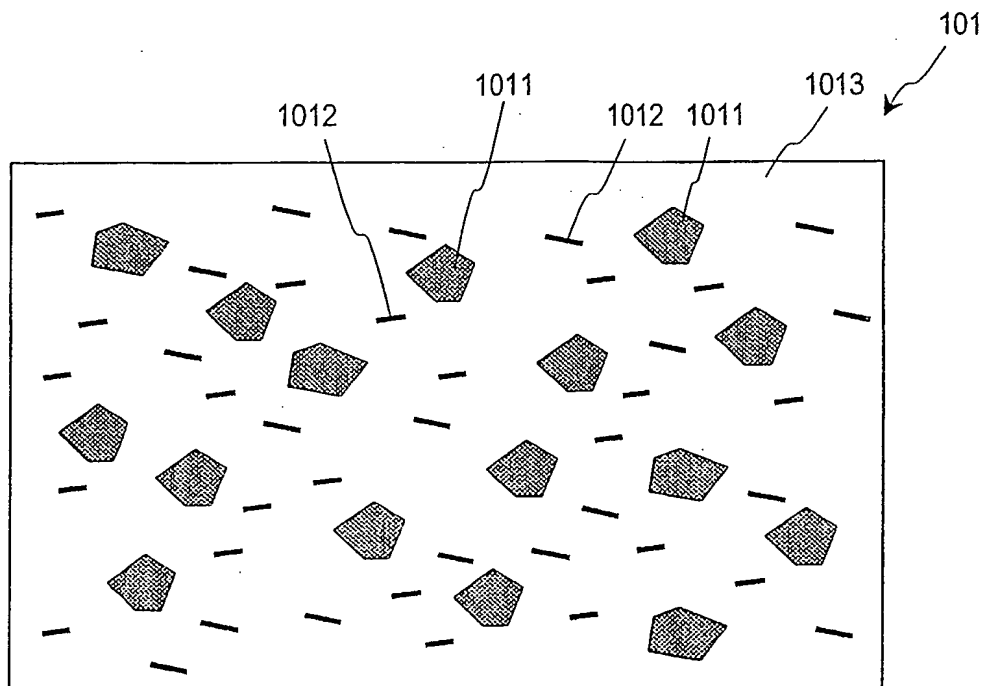


FIG. 3A

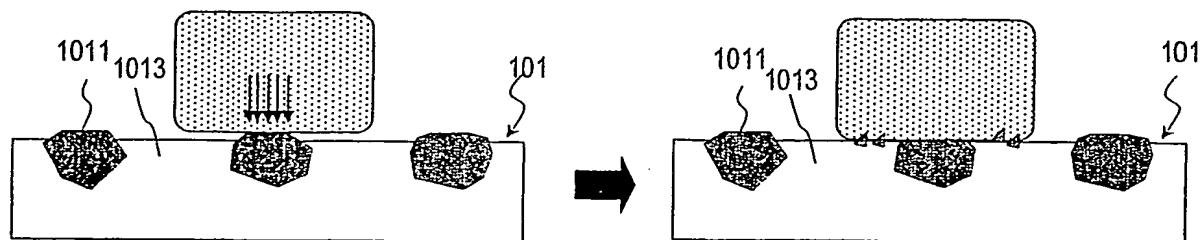


FIG. 3B

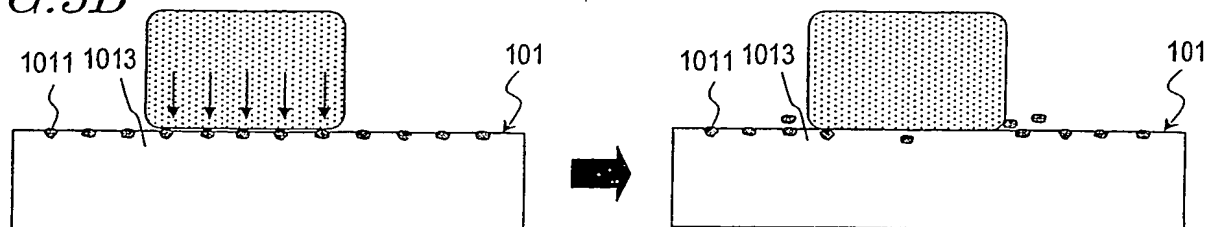


FIG. 3C

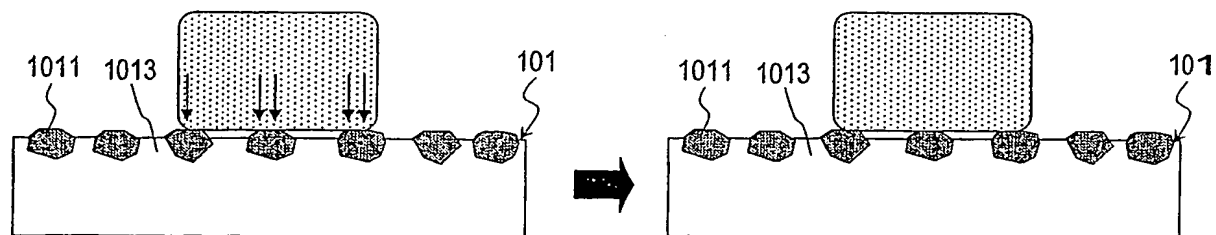


FIG. 4

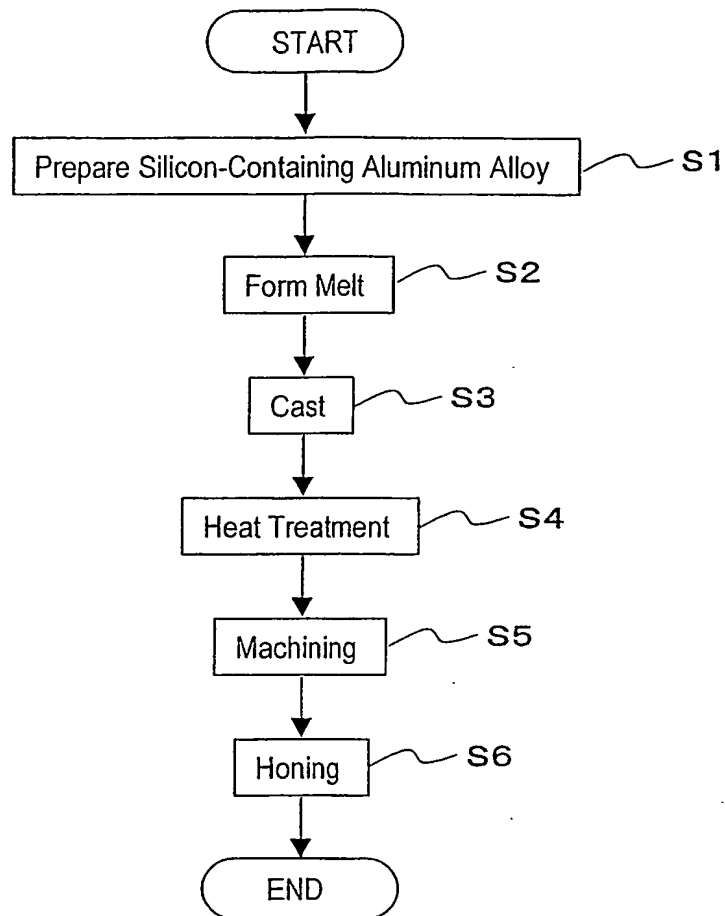


FIG. 5

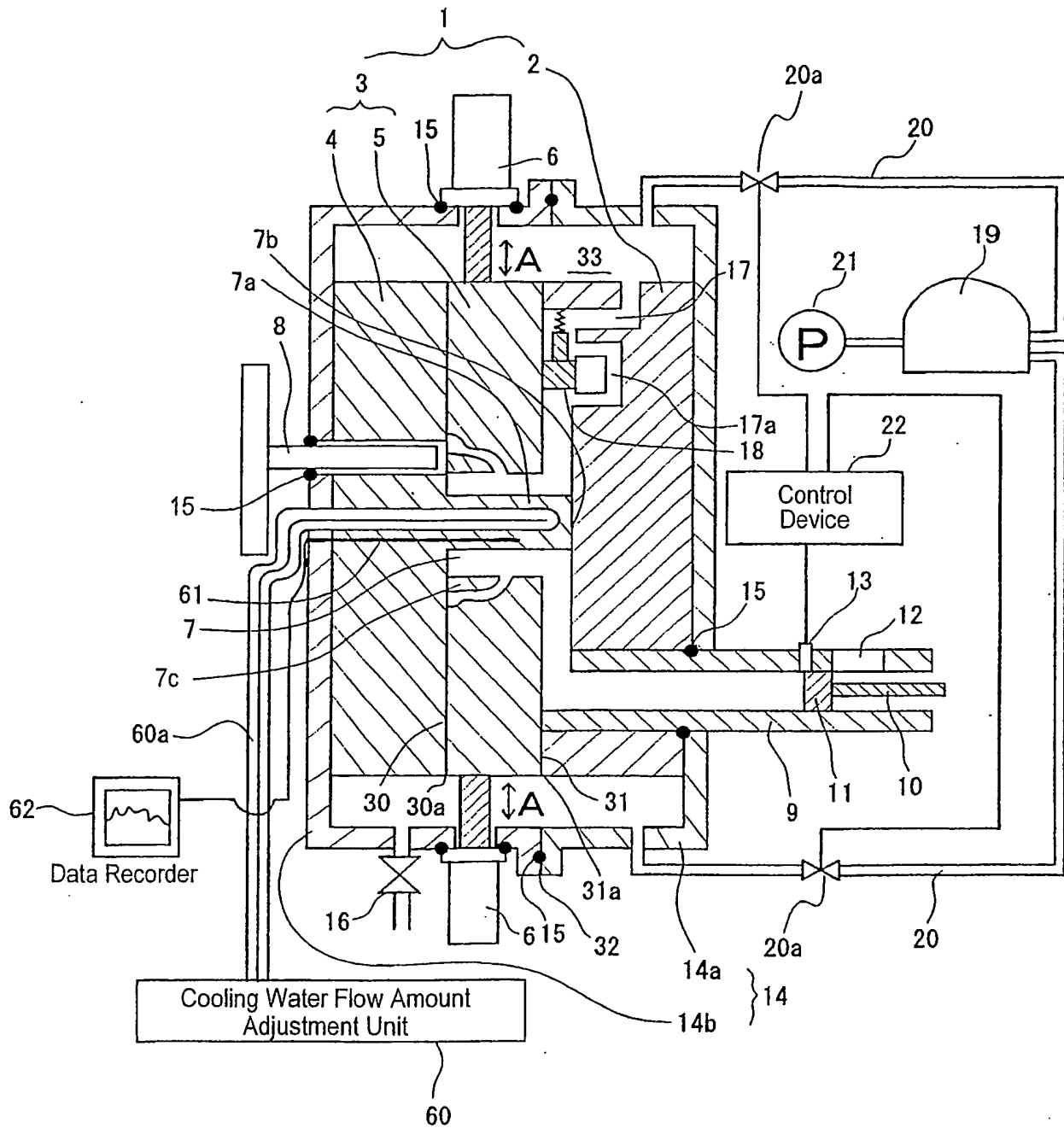


FIG. 6A

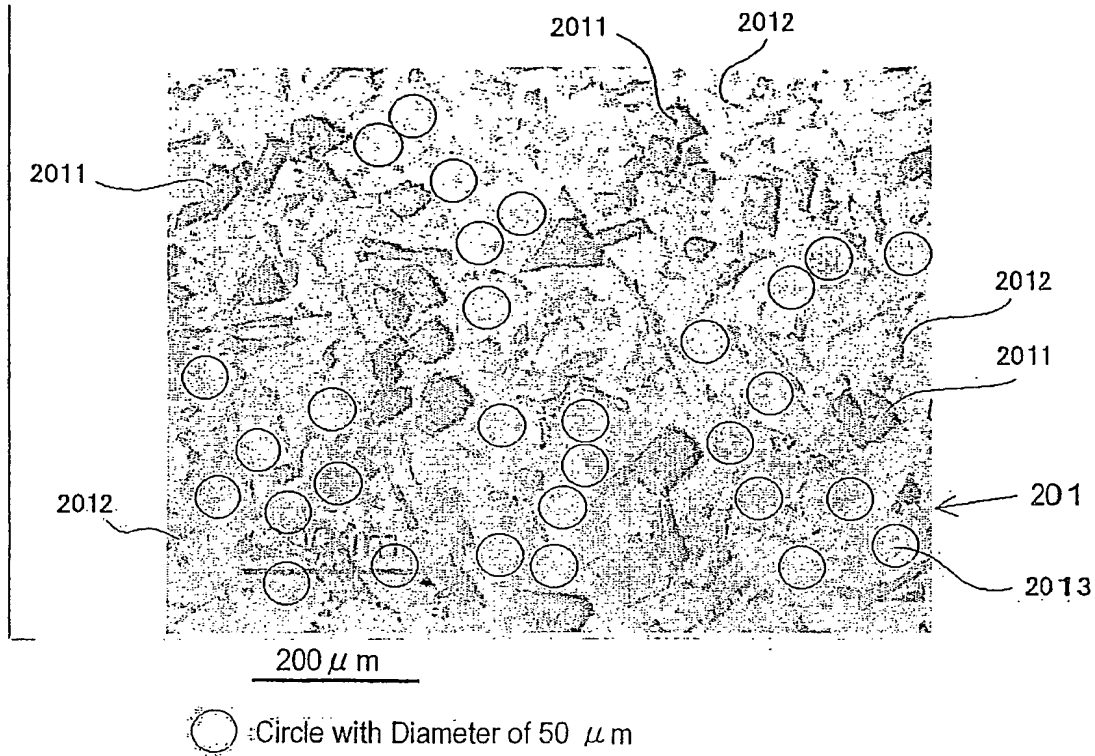


FIG. 6B

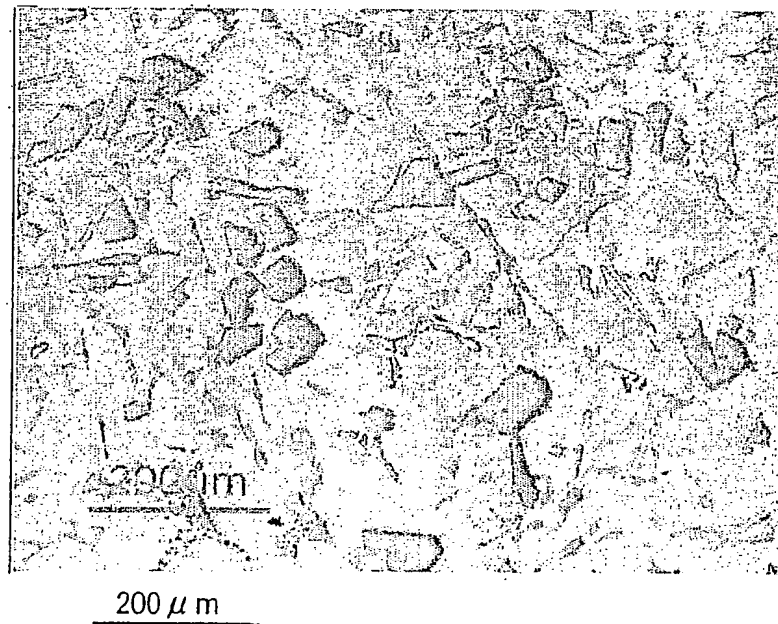


FIG. 7A

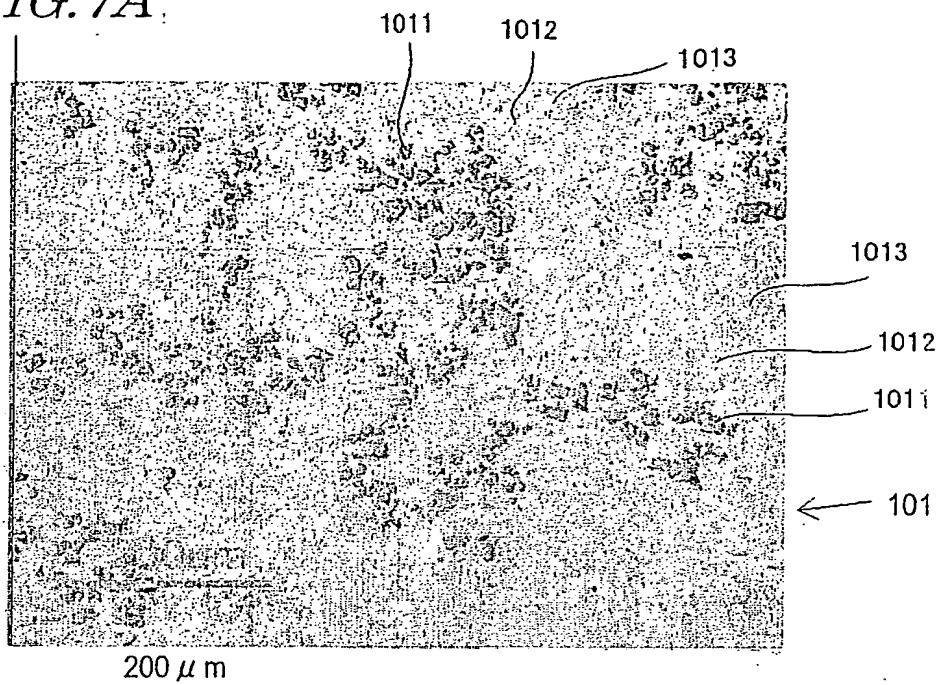


FIG. 7B

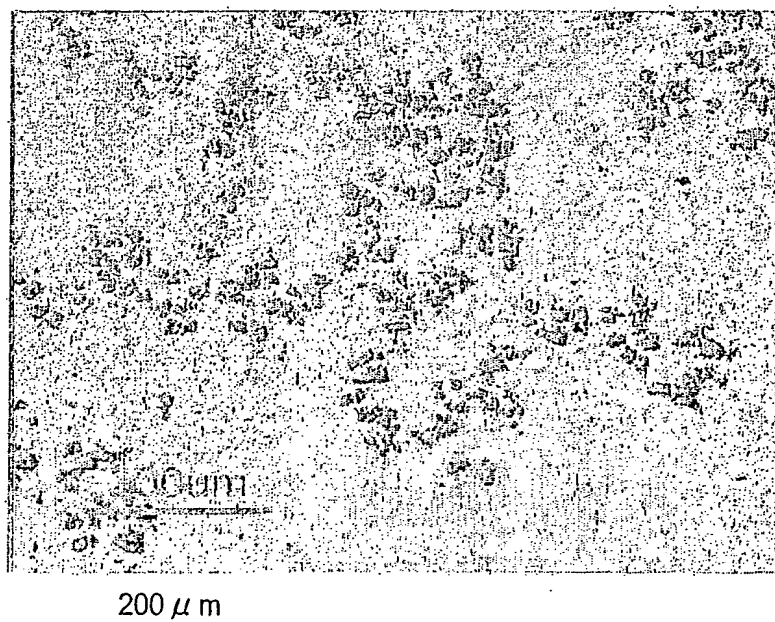


FIG. 8

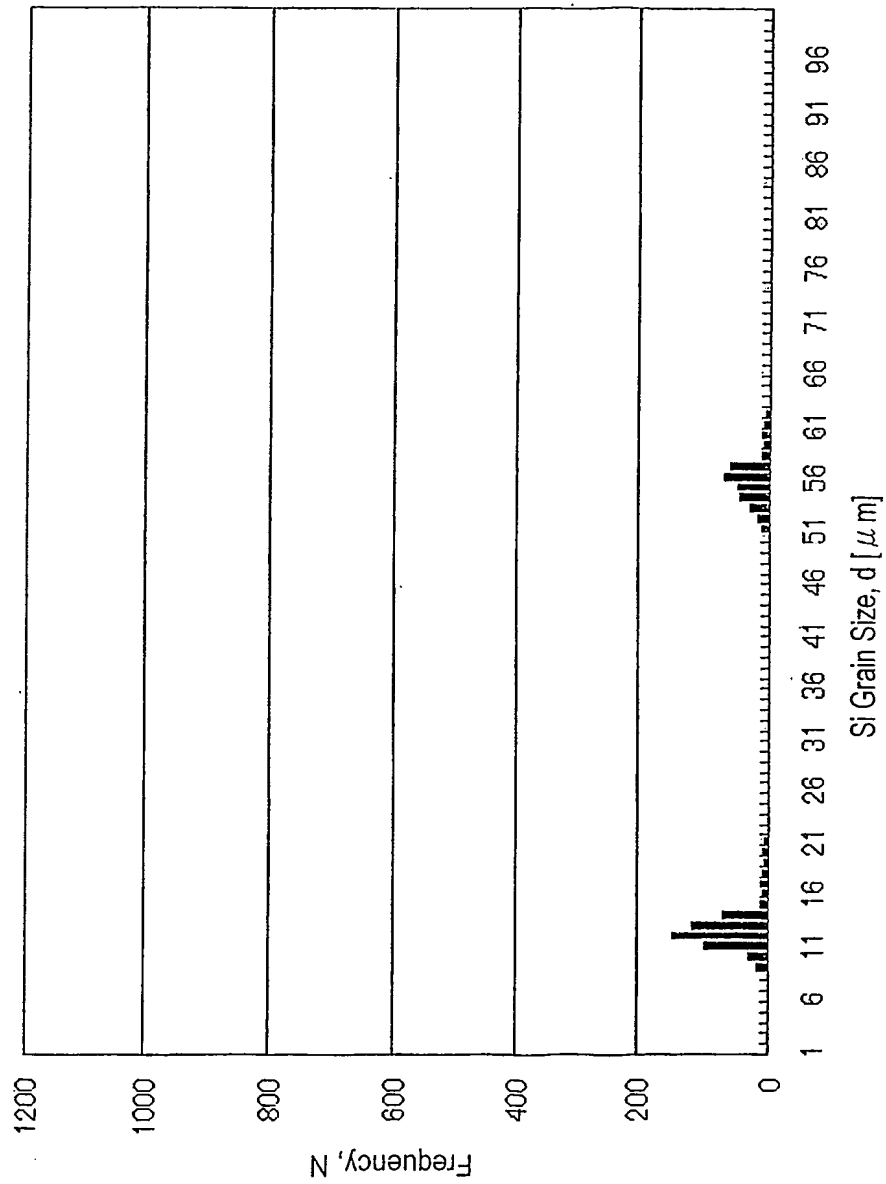


FIG. 9

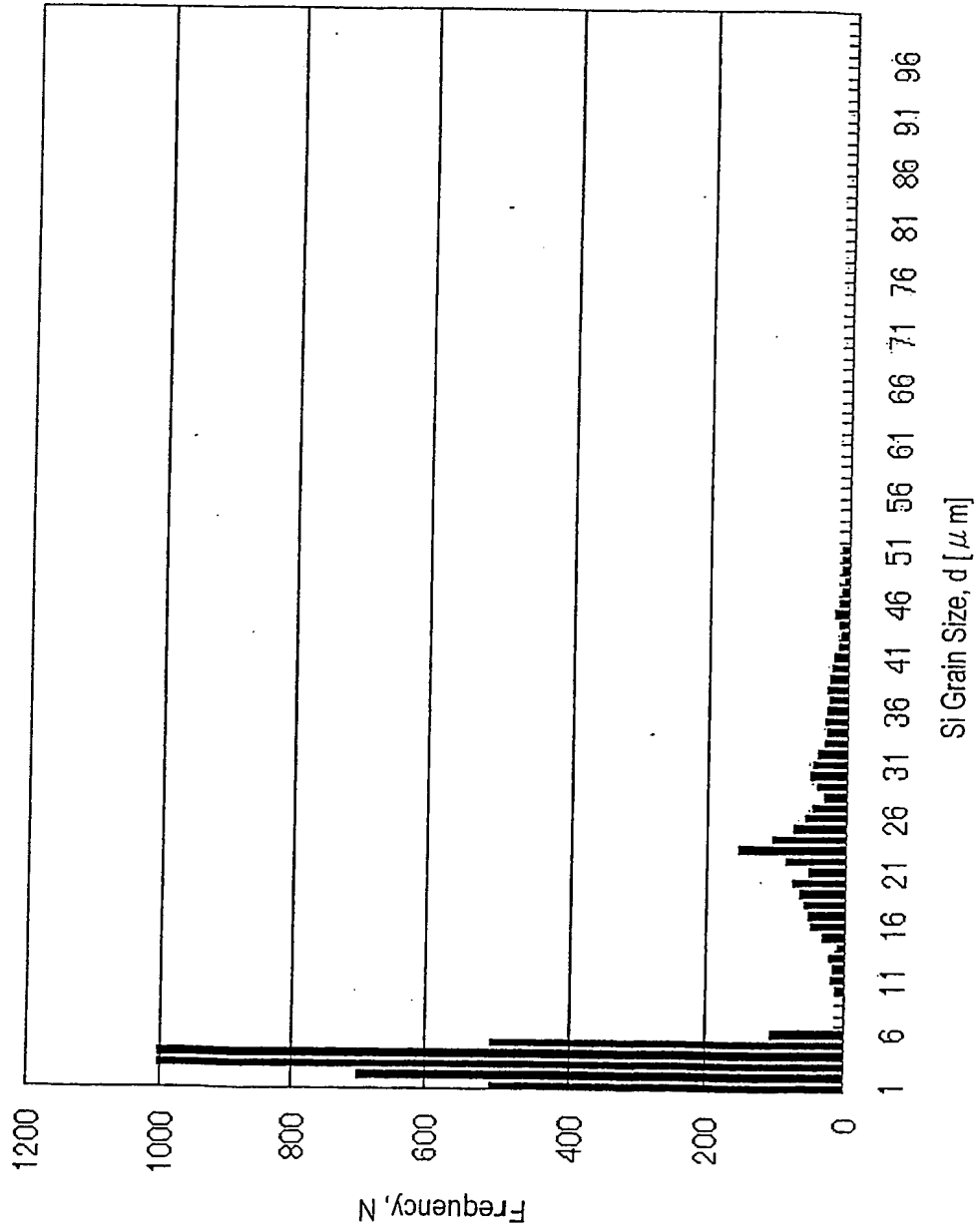


FIG. 10

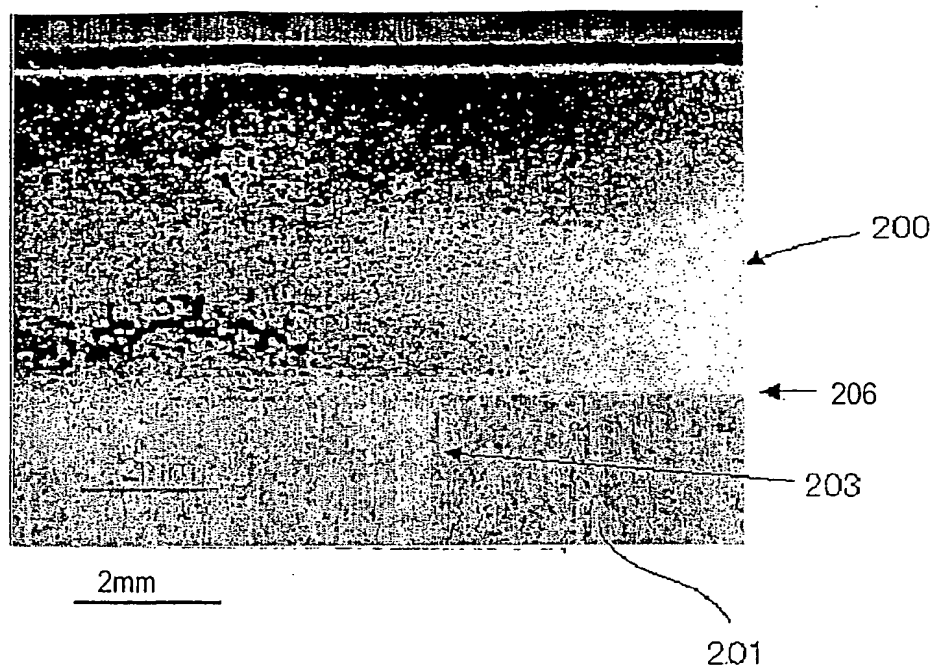


FIG. 11

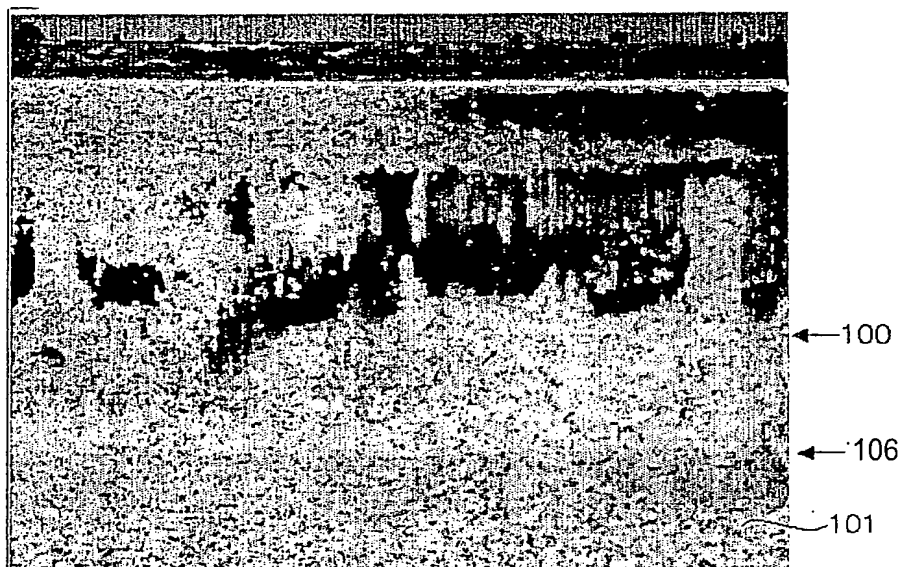


FIG. 12

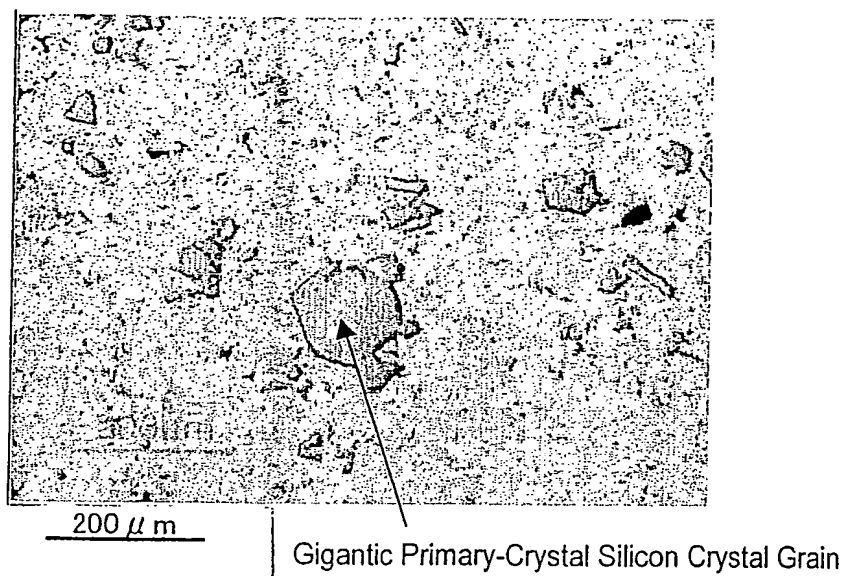


FIG. 13

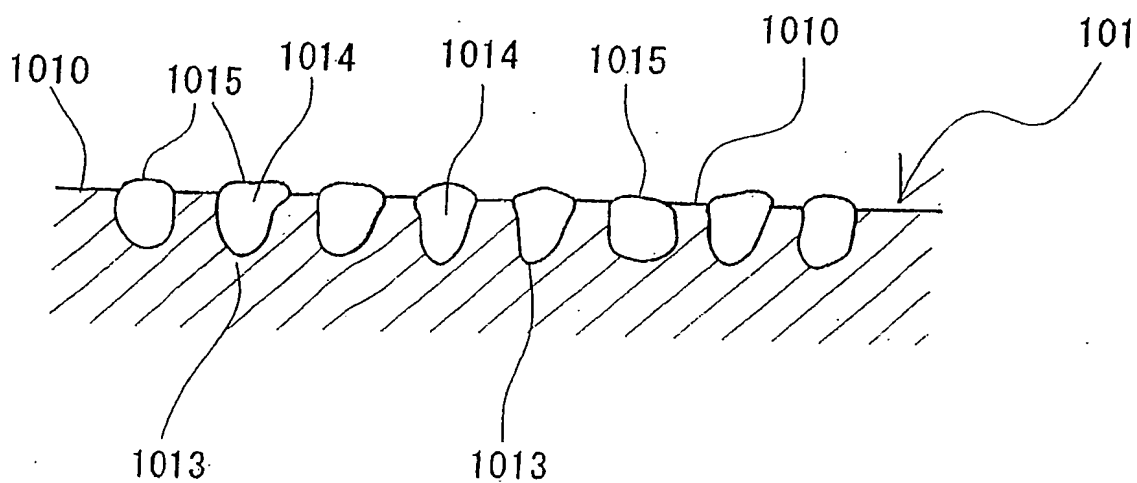


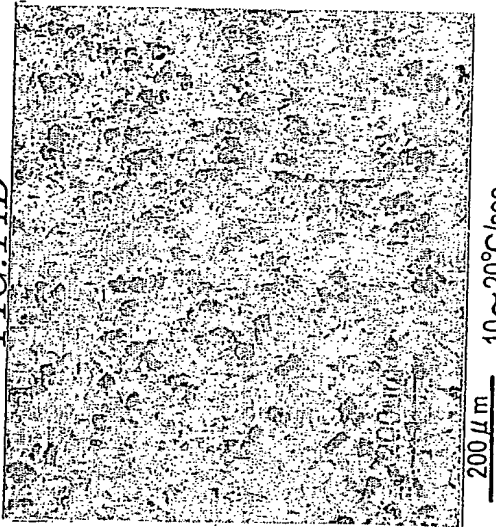
FIG. 14A



1°C/sec or Less

Average Grain Size : 56.5μm
Vacancy Ratio : 15%

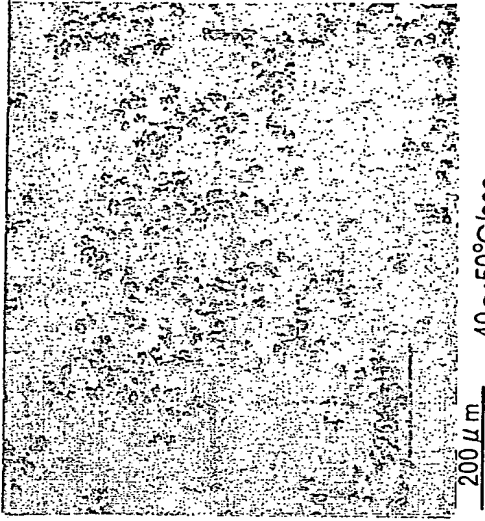
FIG. 14B



10 ~ 20°C/sec

Average Grain Size : 30.3μm
Vacancy Ratio : 6.3%

FIG. 14C



40 ~ 50°C/sec

Average Grain Size : 22.5μm
Vacancy Ratio : 12.5%

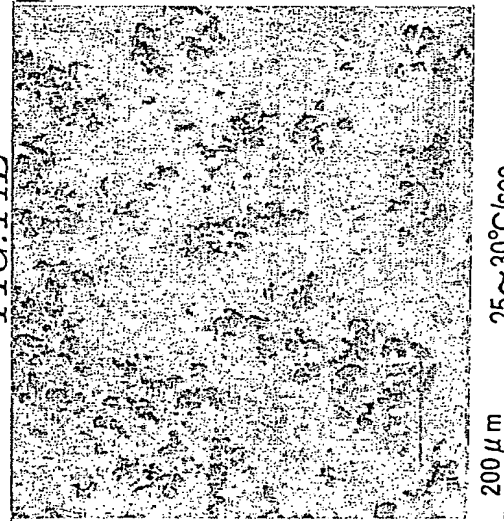
FIG. 14D



4 ~ 10°C/sec

Average Grain Size : 32.0μm
Vacancy Ratio : 12.5%

FIG. 14E



25 ~ 30°C/sec

Average Grain Size : 23.8μm
Vacancy Ratio : 35%

FIG. 15

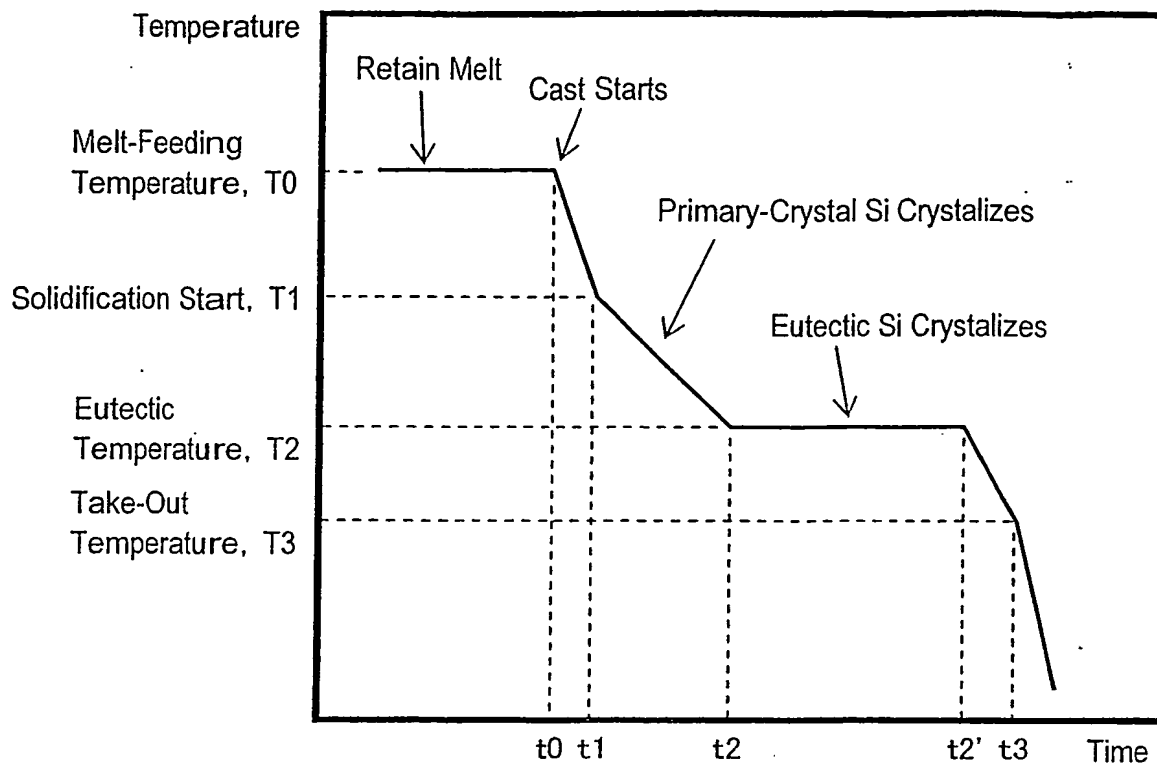


FIG. 16

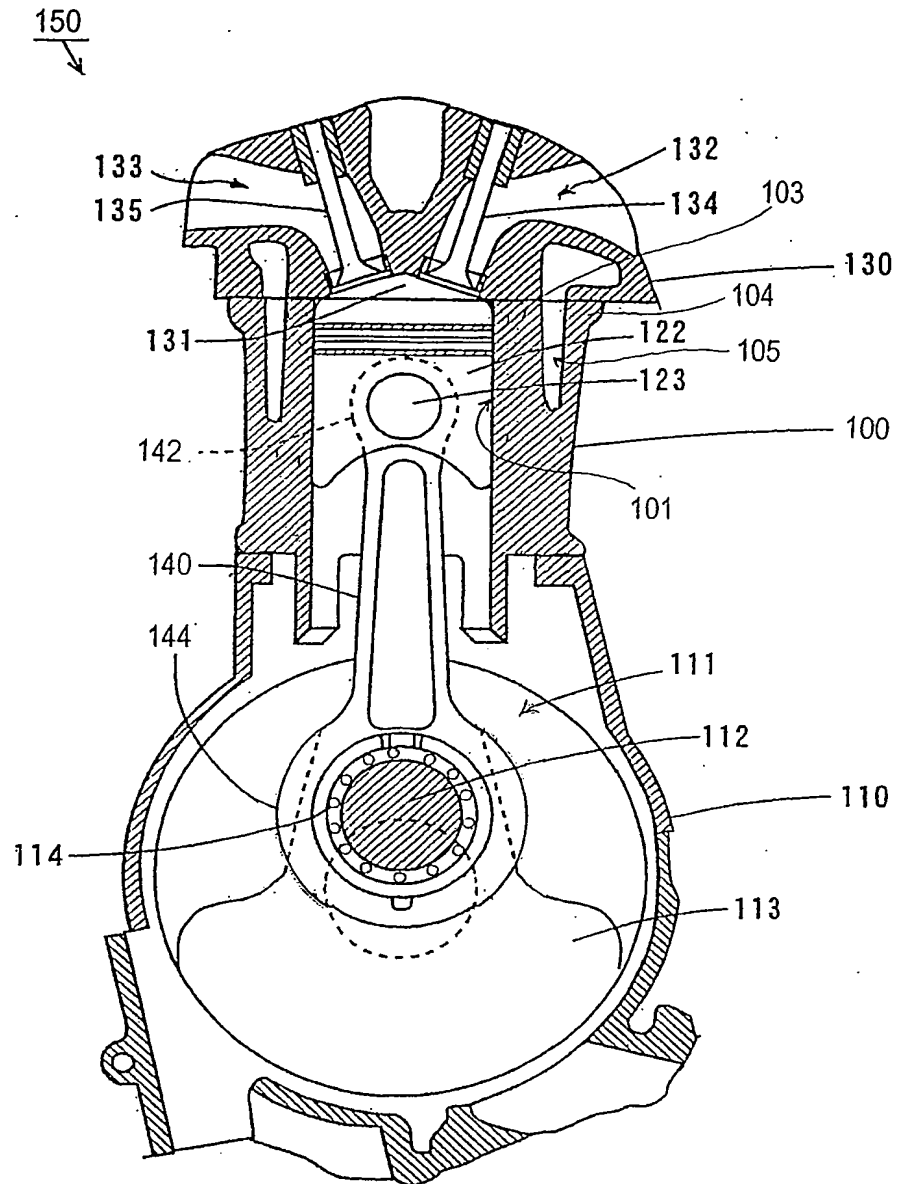


FIG.17

